AUTHOR INDEX

A

Abraham, E. L. *See* Fels, Pawlowski, Abraham, and Cohn.

Abraham, G. N. *See* Looney, Ryan, Takahashi, Fleit, Cohen, Abraham, and Anderson.

Acharya, A. S. *See* Manjula, Acharya, Fairwell, and Fischetti.

Ackerman, D. M. *See* Brown, Curtsinger, Brightwell, Ackerman, Tobin, Polk, George-Nascimento, Valenzuela, and Schultz.

Aderem, A. A., Scott, W. A., and Cohn, Z, A. Evidence for sequential signals in induction of the arachidonic acid cascade in macrophages. 139

Akikusa, B. *See* Mori, Akikusa, Mori, Ueda, Iesato, Yoshida, Ogawa, Kato, Wakashin, Wakashin, and Okuda.

Allen, J. B. *See* Wahl, Hunt, Allen, Wilder, Paglia, and Hand.

Allen, S. *See* Keene, Petitt, Allen, and McKerrow.

Alling, D. W. *See* Kawamura, Sharrow, Alling, Stephany, York-Jolley, and Berzofsky.

Alvarez-Mon, M. *See* Kehrl, Wakefield, Roberts, Jakowlew, Alvarez-Mon, Derynck, Sporn, and Fauci.

Anderson, C. L. *See* Looney, Ryan, Takahashi, Fleit, Cohen, Abraham, and Anderson.

Anderson, P. W. *See* Insel and Anderson.

Andrews, J., Hang, L., Theofilopoulos, A. N., and Dixon, F. J. Lack of relationship between serum gp70 levels and the severity of systemic lupus erythematosus in MRL/l mice. 458

Andrus, L. *See* Granelli-Piperno, Andrus, and Steinman.

Anichini, A., Fossati, G., and Parmiani, G. Heterogeneity of clones from a human metastatic melanoma detected by autologous cytotoxic T lymphocyte clones. 215

Appella, E. *See* Miyazaki, Appella, Zhao, Forman, and Ozato.

Arnold, L. W. *See* Mercolino, Arnold, and Haughton.

Arthur, R. P., and Mason, D. T cells that help B cell responses to soluble antigen are distinguishable from those producing interleukin 2 on mitogenic or allogeneic stimulation. 774

Asch, A. S., Kinoshita, T., Jaffe, E. A., and Nussenzweig, V. Decay-accelerating factor is present on cultured human umbilical vein endothelial cells. 221

Atkinson, J. P. *See* Seya, Turner, and Atkinson.

Audibert, F. *See* Beachey, Gras-Masse, Tarter, Jolivet, Audibert, Chedid, and Seyer.

B

Bainton, D. F., Maloney, M. A., Patt, H. M., and Stern, R. Characterization of rabbit stromal fibroblasts derived from red and yellow bone marrow. 400

Bank, I. *See* Nawroth, Bank, Handley, Cassimeris, Chess, and Stern.

Bartley, G. T. *See* Schmidt, Bartley, Lee, Daley, Royer, Levine, Reinherz, Schlossman, and Ritz.

Bayne, E. K., Rupp, E. A., Limjuco, G., Chin, J., and Schmidt, J. A. Immunocytochemical detection of interleukin 1 within stimulated human monocytes. 1267

Beachey, E. H., Gras-Masse, H., Tarter, A., Jolivet, M., Audibert, F., Chedid, L., and Seyer, J. M. Opsonic antibodies evoked by hybrid peptide copies of types 5 and 24 streptococcal M proteins synthesized in tandem. 1451

—, *See* Dale and Beachey.

Beamer, W. G. *See* Sidman, Marshall, Beamer, Nadeau, and Unanue.

Begley, C. G. *See* Lopez, Begley, Williamson, Warren, Vadas, and Sanderson.

Benacerraf, B. *See* Rock, Yeh, Gramm, Haber, Reiser, and Benacerraf.

Benditt, E. P. *See* Meek, Hoffman, and Benditt.

Benjamin, R. J., Cobbold, S. P., Clark, M. R., and Waldmann, H. Tolerance to rat monoclonal antibodies. Implications for serotherapy. 1539

Bennink, J. R. *See* Yewdell, Bennink, Mackett, Lefrancois, Lyles, and Moss.

Bensussan, A. *See* Mathieu-Mahul, Chen, Larsen, and Bensussan.

Berg, N. *See* Lafuse, Berg, Savarirayan, and David.

Berkowitz, M. R. *See* Bowers and Berkowitz.

Bernheim, H. A. *See* Dinarello, Cannon, Wolff, Bernheim, Beutler, Cerami, Figari, Palladino, and O'Connor.

Bernstein, R. M. *See* Bunn, Bernstein, and Mathews.

Berzofsky, J. A. *See* Kawamura, Sharrow, Alling, Stephany, York-Jolley, and Berzofsky.

Beutler, B. *See* Dinarello, Cannon, Wolff, Bernheim, Beutler, Cerami, Figari, Palladino, and O'Connor.

Bevan, M. J. *See* Lefrancois, Thomas, Bevan, and Trowbridge.

Bloch, K. J. *See* Robinson, Skoskiewicz, Bloch, Castorena, Hayes, Lowenstein, Melvin, Michelassi, and Zapol.

Bluestone, J. A. *See* Ildstad, Bluestone, and Sachs.

—, *See* Shinohara, Bluestone, and Sachs.

Bohuon, C. *See* Nowill, Moingeon, Ythier, Graziani, Faure, Delmon, Rainaut, Forrestier, Bohuon, and Hercend.

Bowers, W. E., and Berkowitz, M. R. Differentiation of dendritic cells in cultures of rat bone marrow cells. 872

Braciale, T. J. *See* Morrison, Lukacher, Braciale, Fan, and Braciale.

Braciale, V. L. *See* Morrison, Lukacher, Braciale, Fan, and Braciale.

Braunstein, N. S. *See* Lechler, Ronchese, Braunstein, and Germain.

Breel, M. *See* Kraal, Breel, Janse, and Bruin.

Brightwell, J. R. *See* Brown, Curtsinger, Brightwell, Ackerman, Tobin, Polk, George-Nascimento, Valenzuela, and Schultz.

Brockhaus, M. *See* Palacios, Neri, and Brockhaus.

Broder, S. *See* Jarret, Mitsuya, Mann, Cossman, Broder, and Reitz.

Brown, G. L., Curtsinger, L., III, Brightwell, J. R., Ackerman, D. M., Tobin, G. R., Polk, H. C., Jr., George-Nascimento, C., Valenzuela, P., and Schultz, G. S. Enhancement of epidermal regeneration by biosynthetic epidermal growth factor. 1319

Brown, J. *See* Schmidt-Ullrich, Brown, Whittle, and Lin.

Bruin, G. *See* Kraal, Breel, Janse, and Bruin.

Bunn, C. C., Bernstein, R. M., and Mathews, M. B. Autoantibodies against alanyl-tRNA synthetase and $tRNA^{Ala}$ coexist and are associated with myositis. 1281

C

Cannon, J. G. *See* Dinarello, Cannon, Wolff, Bernheim, Beutler, Cerami, Figari, Palladino, and O'Connor.

Cardenas, G. *See* Noonan, Kofler, Singer, Cardenas, Dixon, and Theofilopoulos.

Carson, D. A., Seto, S., and Wasson, D. B. Lymphocyte dysfunction after DNA damage by toxic oxygen species. A model of immunodeficiency. 746

Cassimeris, J. *See* Nawroth, Bank, Handley, Cassimeris, Chess, and Stern.

Castorena, G. *See* Robinson, Skoskiewicz, Bloch, Castorena, Hayes, Lowenstein, Melvin, Michelassi, and Zapol.

Catterall, J. R., Sharma, S. D., and Remington, J. S. Oxygen-independent killing by alveolar macrophages. 1113

Caulfield, M. J., Luce, K. J., Shaffer, D., and Lake, J. P. The antibody response to specific immune complexes is under genetic control and correlates with the expression of a recurrent idiotype. 75

Cazenave, P.-A. *See* Primi, Drapier, and Cazenave.

Cerami, A. *See* Dinarello, Cannon, Wolff, Bernheim, Beutler, Cerami, Figari, Palladino, and O'Connor.

Chang, H., Dmitrovsky, E., Hieter, P. A., Mitchell, K., Leder, P., Turoczi, L., Kirsch, I. R., and Hollis, G. F. Identification of three new Ig λ-like genes in man. 425

Changelian, P. S., and Fearon, D. T. Tissue-specific phosphorylation of complement receptors CR1 and CR2. 101

Chedid, L. *See* Beachey, Gras-Masse, Tarter, Jolivet, Audibert, Chedid, and Seyer.

Cheever, M. A., Thompson, D. B., Klarnet, J. P., and Greenberg, P. D. Antigen-driven long term–cultured T cells proliferate in vivo, distribute widely, mediate specific tumor therapy, and persist long-term as functional memory T cells. 1100

Chen, L. K. *See* Mathieu-Mahul, Chen, Larsen, and Bensussan.

Cheng, G. Y., Minden, M. D., Toyonaga, B., Mak, T. W., and McCulloch, E. A. T cell receptor and Ig gene rearrangements in acute myeloblastic leukemia. 414

Chesebro, B. *See* Morrison, Nishio, and Chesebro.

Chess, L. *See* Nawroth, Bank, Handley, Cassimeris, Chess, and Stern.

Chin, J. *See* Bayne, Rupp, Limjuco, Chin, and Schmidt.

Clark, M. R. *See* Benjamin, Cobbold, Clark, and Waldmann.

Clausen, H. *See* Jacewicz, Clausen, Nudelman, Donohue-Rolfe, and Keusch.

Cobbold, S. P. *See* Benjamin, Cobbold, Clark, and Waldmann.

Cohen, H. J. *See* Looney, Ryan, Takahashi, Fleit, Cohen, Abraham, and Anderson.

Cohn, M. *See* Epstein, Sham, Womack, Yagüe, Palmer, and Cohn.

Cohn, Z. A. *See* Fels, Pawlowski, Abraham, and Cohn.

—, *See* Aderem, Scott, and Cohn.

Collins, F. M. *See* Orme and Collins.

Conlon, P. *See* Grabstein, Eisenman, Mochizuki, Shanebeck, Conlon, Hopp, March, and Gillis.

Cossman, J. *See* Jarret, Mitsuya, Mann, Cossman, Broder, and Reitz.

Crocker, P. *See* Lee, Crocker, and Gordon.

Curtsinger, L., III *See* Brown, Curtsinger, Brightwell, Ackerman, Tobin, Polk, George-Nascimento, Valenzuela, and Schultz.

Cwirla, S. *See* Lanier, Cwirla, Federspiel, and Phillips.

D

Dale, J. B., and Beachey, E H. Localization of protective epitopes of the amino terminus of type 5 streptococcal M protein. 1191

Daley, J. F. *See* Schmidt, Bartley, Lee, Daley, Royer, Levine, Reinherz, Schlossman, and Ritz.

Daley, M. J., Nakamura, M., and Gefter, M. L. Functional and biochemical characterization of a secreted I-J(+) suppressor factor that binds to immunoglobulin. 1415

Dallman, M. J. *See* Weyand, Goronzy, Dallman, and Fathman.

Danner, M. *See* Köck, Danner, Stadler, and Luger.

Dasch, J. R., and Jones, P. P. Independent regulation of IgM, IgD, and Ia antigen expression in cultured immature B lymphocytes. 938

David, C. S. *See* Lafuse, Berg, Savarirayan, and David.

—, *See* Rodriguez, Leibowitz, and David.

Davies, P. J. A. *See* Murtaugh, Dennison, Stein, and Davies.

Davitz, M. A., Low, M. G., and Nussenzweig, V. Release of decay-accelerating factor (DAF) from

the cell membrane by phosphatidylinositol-specific phospholipase C (PIPLC). Selective modification of a complement regulatory protein. 1150

de Goede, R. E. Y. *See* Zijlstra, Vasmel, Voormanns, de Goede, Schoenmakers, Nieland, Slater, and Melief.

Delmon, L. *See* Nowill, Moingeon, Ythier, Graziani, Faure, Delmon, Rainaut, Forrestier, Bohuon, and Hercend.

Dennert, G. *See* Kupfer, Singer, and Dennert.

Dennison, O. *See* Murtaugh, Dennison, Stein, and Davies.

Derynck, R. *See* Kehrl, Wakefield, Roberts, Jakowlew, Alvarez-Mon, Derynck, Sporn, and Fauci.

Detmers, P. A. *See* Wright, Detmers, Jong, and Meyer.

Dinarello, C. A., Cannon, J. G., Wolff, S. M., Bernheim, H. A., Beutler, B., Cerami, A., Figari, I. S., Palladino, M. A., Jr., and O'Connor, J. V. Tumor necrosis factor (cachectin) is an endogenous pyrogen and induces production of interleukin 1. 1433

—, *See* Nachman, Hajjar, Silverstein, and Dinarello.

Dixon, F. J. *See* Andrews, Hang, Theofilopoulos, and Dixon.

—, *See* Noonan, Kofler, Singer, Cardenas, Dixon, and Theofilopoulos.

Dmitrovsky, E. *See* Chang, Dmitrovsky, Hieter, Mitchell, Leder, Turoczi, Kirsch, and Hollis.

Donohue-Rolfe, A. *See* Jacewicz, Clausen, Nudelman, Donohue-Rolfe, and Keusch.

Drapier, A.-M. *See* Primi, Drapier, and Cazenave.

E

Eichmann, K. *See* Jankovic, Woodland, Melchers, Weltzien, Kubo, and Eichmann.

Eisenman, J. *See* Grabstein, Eisenman, Mochizuki, Shanebeck, Conlon, Hopp, March, and Gillis.

Ellner, J. J. *See* Toossi, Kleinhenz, and Ellner.

Emeis, J. J., and Kooistra, T. Interleukin 1 and lipopolysaccharide induce an inhibitor of tissue-type plasminogen activator in vivo and in cultured endothelial cells. 1260

Emmrich, F., Thole, J., van Embden, J., and Kaufmann, S. H. E. A recombinant 64 kD protein of *Mycobacterium bovis* Bacillus Calmette-Guerin specifically stimulates human T4 clones reactive to mycobacterial antigens. 1024

Epstein, R., Sham, G., Womack, J., Yagüe, J., Palmer, E., and Cohn, M. The cytotoxic T cell response to the male-specific histocompatibility antigen (H-Y) is controlled by two dominant immune response genes; one in the MHC, the other in the Tarα-locus. 759

Essani, K., Srinivasappa, J., McClintock, P. R., Prabhakar, B. S., and Notkins, A. L. Multiple organ–reactive IgG antibody induced by an antiidiotypic antibody to a human monoclonal IgM autoantibody. 1355

F

Fairwell, T. *See* Manjula, Acharya, Fairwell, and Fischetti.

Fan, D. P. *See* Morrison, Lukacher, Braciale, Fan, and Braciale.

Farquhar, M. G. *See* Miettinen, Stow, Mentone, and Farquhar.

Fathman, C. G. *See* Weyand, Goronzy, Dallman, and Fathman.

—, *See* Kyewski, Fathman, and Rouse.

Fauci, A. S. *See* Kehrl, Wakefield, Roberts, Jakowlew, Alvarez-Mon, Derynck, Sporn, and Fauci.

Faure, F. *See* Nowill, Moingeon, Ythier, Graziani, Faure, Delmon, Rainaut, Forrestier, Bohuon, and Hercend.

Fearon, D. T. *See* Changelian and Fearon.

Federspiel, N. *See* Lanier, Cwirla, Federspiel, and Phillips.

Feinman, R. *See* Vilček, Palombella, Henriksen-Destefano, Swenson, Feinman, Hirai, and Tsujimoto.

Fels, A. O. S., Pawlowski, N. A., Abraham, E. L., and Cohn, Z. A. Compartmentalized regulation of macrophage arachidonic acid metabolism. 752

Ferrans, V. J. *See* Sertl, Takemura, Tschachler, Ferrans, Kaliner, and Shevach.

Ferrero, D. *See* Santoli, Tweardy, Ferrero, Kreider, and Rovera.

Fewell, J. W. *See* Leiter, Fewell, and Kuff.

Figari, I. S. *See* Dinarello, Cannon, Wolff, Bernheim, Beutler, Cerami, Figari, Palladino, and O'Connor.

Fillit, H. *See* Kefalides, Pegg, Ohno, Poon-King, Zabriskie, and Fillit.

Fischer, G. F. *See* Holter, Fischer, Majdic, Stockinger, and Knapp.

Fischetti, V. A. *See* Manjula, Acharya, Fairwell, and Fischetti.

Fitch, F. W. *See* Moldwin, Lancki, Herold, and Fitch.

Fleit, H. B. *See* Looney, Ryan, Takahashi, Fleit, Cohen, Abraham, and Anderson.

Forman, J. *See* Miyazaki, Appella, Zhao, Forman, and Ozato.

Forrestier, F., *See* Nowill, Moingeon, Ythier, Graziani, Faure, Delmon, Rainaut, Forrestier, Bohuon, and Hercend.

Fossati, G. *See* Anichini, Fossati, and Parmiani.

Fougereau, M. *See* Schiff, Milili, Hue, Rudikoff, and Fougereau.

Fujii, M., Sugamura, K., Sano, K., Nakai, M., Sugita, K., and Hinuma, Y. High-affinity receptor–mediated internalization and degradation of interleukin 2 in human T cells. 550

Fujinami, R. S. *See* McChesney, Fujinami, Lampert, and Oldstone.

G

Gajl-Peczalska, K. J. *See* Uckun, Gajl-Peczalska, Kersey, Houston, and Vallera.

Gefter, M. L. *See* Daley, Nakamura, and Gefter.

Geha, R. S. *See* Leung, Young, Wood, and Geha.

George-Nascimento, C. *See* Brown, Curtsinger, Brightwell, Ackerman, Tobin, Polk, George-Nascimento, Valenzuela, and Schultz.

Germain, R. N. *See* Gunter, Kroczek, Shevach, and Germain.

—, *See* Lechler, Ronchese, Braunstein, and Germain.
Gilbertson, S. M. *See* Shah, Keij, Gilbertson, and Rowley.
Gillis, S. *See* Grabstein, Eisenman, Mochizuki, Shanebeck, Conlon, Hopp, March, and Gillis.
Goldschneider, I., Komschlies, K. L., and Greiner, D. Studies of thymocytopoiesis in rats and mice. I. Kinetics of appearance of thymocytes using a direct intrathymic adoptive transfer assay for thymocyte precursors. 1
Gordon, S. *See* Lee, Crocker, and Gordon.
Goronzy, J. *See* Weyand, Goronzy, Dallman, and Fathman.
Grabstein, K., Eisenman, J., Mochizuki, D., Shanebeck, K., Conlon, P., Hopp, T., March, C., and Gillis, S. Purification to homogeneity of B cell stimulating factor. A molecule that stimulates proliferation of multiple lymphokine-dependent cell lines. 1405
Gramm, C. F. *See* Rock, Yeh, Gramm, Haber, Reiser, and Benacerraf.
Granelli-Piperno, A., Andrus, L., and Steinman, R. M. Lymphokine and nonlymphokine mRNA levels in stimulated human T cells. Kinetics, mitogen requirements, and effects of cyclosporin A. 922
Gras-Masse, H. *See* Beachey, Gras-Masse, Tarter, Jolivet, Audibert, Chedid, and Seyer.
Graziani, M. *See* Nowill, Moingeon, Ythier, Graziani, Faure, Delmon, Rainaut, Forrestier, Bohuon, and Hercend.
Greenberg, P. D. *See* Cheever, Thompson, Klarnet, and Greenberg.
Greiner, D. *See* Goldschneider, Komschlies, and Greiner.
Guénet, J.-L. *See* Lindahl, Hausmann, Robinson, Guénet, Wharton, and Winking.
Gullberg, M., and Smith, K. A. Regulation of T cell autocrine growth. $T4^+$ cells become refractory to interleukin 2. 270
Gunter, K. C., Kroczek, R. A., Shevach, E. M., and Germain, R. N. Functional expression of the murine Thy-1.2 gene in transfected human T cells. 285

H

Haber, S. I. *See* Rock, Yeh, Gramm, Haber, Reiser, and Benacerraf.
Hajjar, K. A. *See* Nachman, Hajjar, Silverstein, and Dinarello.
Hämmerling, G. *See* Stephan, Sun, Lindahl, Meyer, Hämmerling, Hood, and Steinmetz.
Hand, A. R. *See* Wahl, Hunt, Allen, Wilder, Paglia, and Hand.
Handley, D. *See* Nawroth, Bank, Handley, Cassimeris, Chess, and Stern.
Hang, L. *See* Andrews, Hang, Theofilopoulos, and Dixon.
Haughton, G. *See* Mercolino, Arnold, and Haughton.
Hausmann, B. *See* Lindahl, Hausmann, Robinson, Guénet, Wharton, and Winking.
Hayes, E. *See* Robinson, Skoskiewicz, Bloch, Castorena, Hayes, Lowenstein, Melvin, Michelassi, and Zapol.
Helenius, A. *See* Ukkonen, Lewis, Marsh, Helenius, and Mellman.
Hengartner, H. *See* Iwamoto, Rupp, Ohashi, Walker, Pircher, Joho, Hengartner, and Mak.
Henriksen-Destefano, D. *See* Vilček, Palombella, Henriksen-Destefano, Swenson, Feinman, Hirai, and Tsujimoto.
Hercend, T. *See* Nowill, Moingeon, Ythier, Graziani, Faure, Delmon, Rainaut, Forrestier, Bohuon, and Hercend.
Herold, K. C. *See* Moldwin, Lancki, Herold, and Fitch.
Hieter, P. A. *See* Chang, Dmitrovsky, Hieter, Mitchell, Leder, Turoczi, Kirsch, and Hollis.
Hinuma, Y. *See* Fujii, Sugamura, Sano, Nakai, Sugita, and Hinuma.
Hirai, M. *See* Vilček, Palombella, Henriksen-Destefano, Swenson, Feinman, Hirai, and Tsujimoto.
Hoffman, J. S. *See* Meek, Hoffman, and Benditt.
Hoffman, R. W. *See* Perez, Hoffman, Titus, and Segal.
Hollis, G. F. *See* Chang, Dmitrovsky, Hieter, Mitchell, Leder, Turoczi, Kirsch, and Hollis.
Holter, W., Fischer, G. F., Majdic, O., Stockinger, H., and Knapp, W. T cell stimulation via the erythrocyte receptor. Synergism between monoclonal antibodies and phorbol myristate acetate without changes of free cytoplasmic Ca^{++} levels. 654
Homda, M. *See* Klinman, Mushinski, Homda, Ishigatsubo, Mountz, Raveche, and Steinberg.
Hood, L. *See* Stephan, Sun, Lindahl, Meyer, Hämmerling, Hood, and Steinmetz.
Hopp, T. *See* Grabstein, Eisenman, Mochizuki, Shanebeck, Conlon, Hopp, March, and Gillis.
Horibe, K. *See* Morishita, Shiku, Horibe, Obata, Stockert, Oettgen, Old, and Yamada.
Houston, L. L. *See* Uckun, Gajl-Peczalska, Kersey, Houston, and Vallera.
Hue, I. *See* Schiff, Milili, Hue, Rudikoff, and Fougereau.
Hunt, D. A. *See* Wahl, Hunt, Allen, Wilder, Paglia, and Hand.

I

Iesato, K. *See* Mori, Akikusa, Mori, Ueda, Iesato, Yoshida, Ogawa, Kato, Wakashin, Wakashin, and Okuda.
Ildstad, S. T., Bluestone, J. A., and Sachs, D. H. Alloresistance to engraftment of allogeneic donor bone marrow is mediated by an $Lyt\text{-}2^+$ T cell in mixed allogeneic reconstitution. (C57BL/10Sn + B10.D2/nSn → C57BL/10Sn). 1343
Inaba, K., and Steinman, R. M. Accessory cell–T lymphocyte interactions. Antigen-dependent and -independent clustering. 247
—, Kitaura, M., Kato, T., Watanabe, Y., Kawade, Y., and Muramatsu, S. Contrasting effect of α/β- and γ-interferons on expression of macrophage Ia antigens. 1030
Insel, R. A., and Anderson, P. W. Oligosaccharide–protein conjugate vaccines induce and prime for oligoclonal IgG antibody responses to the *Hae-*

mophilus influenzae b capsular polysaccharide in human infants. 262

Ishigatsubo, Y. *See* Klinman, Mushinski, Homda, Ishigatsubo, Mountz, Raveche, and Steinberg.

Iwamoto, A., Rupp, F., Ohashi, P. S., Walker, C. L., Pircher, H., Joho, R., Hengartner, H., and Mak, T. W. T cell–specific genes in C57BL/10 mice. Sequence and expression of new constant and variable region genes. 1203

—, *See* Zauderer, Iwamoto, and Mak.

J

Jacewicz, M., Clausen, H., Nudelman, E., Donohue-Rolfe, A., and Keusch, G. T. Pathogenesis of shigella diarrhea. XI. Isolation of a shigella toxin–binding glycolipid from rabbit jejunum and HeLa cells, and its identification as globotriaosylceramide. 1391

Jaffe, E. A. *See* Asch, Kinoshita, Jaffe, and Nussenzweig.

Jakowlew, S. *See* Kehrl, Wakefield, Roberts, Jakowlew, Alvarez-Mon, Derynck, Sporn, and Fauci.

Janeway, C. A. Jr. *See* Tite, Kaye, Saizawa, Ming, Katz, Smith, and Janeway.

Jancović, D. L., Woodland, D., Melchers, I., Weltzien, H.-U., Kubo, R. T., and Eichmann, K. Involvement of the T cell antigen receptor and of Lyt-2 in the cytotoxic function of aged killer (AK) T cells. 1459

Janse, M. *See* Kraal, Breel, Janse, and Bruin.

Jarret, R. F., Mitsuya, H., Mann, D. L., Cossman, J., Broder, S., and Reitz, M. S. Configuration and expression of the T cell receptor β chain gene in human T-lymphotrophic virus I–infected cells. 383

Johnston, K. H., and Zabriskie, J. B. Purification and partial characterization of the nephritis strain–associated protein from *Streptococcus pyogenes*, group A. 697

Joho, R. *See* Iwamoto, Rupp, Ohashi, Walker, Pircher, Joho, Hengartner, and Mak.

Jolivet, M. *See* Beachey, Gras-Masse, Tarter, Jolivet, Audibert, Chedid, and Seyer.

Jones, P. P. *See* Dasch and Jones.

Jones, R. L. Hematin-derived anticoagulant. Generation in vitro and in vivo. 724

Jong, M. T. C. *See* Wright, Detmers, Jong, and Meyer.

K

Kaliner, M. A. *See* Sertl, Takemura, Tschachler, Ferrans, Kaliner, and Shevach.

Kang, C.-Y., and Kohler, H. Immunoglobulin with complementary paratope and idiotope. 787

Kato, I. *See* Mori, Akikusa, Mori, Ueda, Iesato, Yoshida, Ogawa, Kato, Wakashin, Wakashin, and Okuda.

Kato, T. *See* Inaba, Kitaura, Kato, Watanabe, Kawade, and Muramatsu.

Katz, M. E. *See* Tite, Kaye, Saizawa, Ming, Katz, Smith, and Janeway.

Kaufmann, S. H. E. *See* Emmrich, Thole, van Embden, and Kaufmann.

Kawade, Y. *See* Inaba, Kitaura, Kato, Watanabe, Kawade, and Muramatsu.

Kawamura, H., Sharrow, S. O., Alling, D. W., Stephany, D., York-Jolley, J., and Berzofsky, J. A. Interleukin 2 receptor expression in unstimulated murine splenic T cells. Localization to L3T4$^+$ cells and regulation by non-H-2-linked genes. 1376

Kaye, J. *See* Tite, Kaye, Saizawa, Ming, Katz, Smith, and Janeway.

Keene, W. E., Petitt, M. G., Allen, S., and McKerrow, J. H. The major neutral proteinase of *Entamoeba histolytica*. 536

Kefalides, N. A., Pegg, M. T., Ohno, N., Poon-King, T., Zabriskie, J., and Fillit, H. Antibodies to basement membrane collagen and to laminin are present in sera from patients with poststreptococcal glomerulonephritis. 588

Kehrl, J. H., Wakefield, L. M., Roberts, A. B., Jakowlew, S., Alvarez-Mon, M., Derynck, R., Sporn, M. B., and Fauci, A. S. Production of transforming growth factor β by human T lymphocytes, and its potential role in the regulation of T cell growth. 1037

Keij, J. *See* Shah, Keij, Gilbertson, and Rowley.

Kelley, K. W. *See* Westly, Kleiss, Kelley, Wong, and Yuen.

Kersey, J. H. *See* Uckun, Gajl-Peczalska, Kersey, Houston, and Vallera.

Keusch, G. T. *See* Jacewicz, Clausen, Nudelman, Donohue-Rolfe, and Keusch.

Kimura, H., Silvers, W. K., and Wilson, D. B. Immunogenicity and crossreactivity of specificity-associated markers on alloreactive T cells. Confirmation based on the model of tolerance abolition by adoptive transfer. 469

Kinoshita, T. *See* Asch, Kinoshita, Jaffe, and Nussenzweig.

Kirsch, I. R. *See* Chang, Dmitrovsky, Hieter, Mitchell, Leder, Turoczi, Kirsch, and Hollis.

Kitaura, M. *See* Inaba, Kitaura, Kato, Watanabe, Kawade, and Muramatsu.

Klarnet, J. P. *See* Cheever, Thompson, Klarnet, and Greenberg.

Kleinhenz, M. E. *See* Toossi, Kleinhenz, and Ellner.

Kleiss, A. J. *See* Westly, Kleiss, Kelley, Wong, and Yuen.

Klinman, D. M., Mushinski, J. F., Homda, M., Ishigatsubo, Y., Mountz, J. D., Raveche, E. S., and Steinberg, A. D. Oncogene expression in autoimmune and normal peripheral blood mononuclear cells. 1292

Knapp, W. *See* Holter, Fischer, Majdic, Stockinger, and Knapp.

Köck, A., Danner, M., Stadler, B. M., and Luger, T. A. Characterization of a monoclonal antibody directed against the biologically active site of human interleukin 1. 463

Kofler, R. *See* Noonan, Kofler, Singer, Cardenas, Dixon, and Theofilopoulos.

Kohler, H. *See* Kang and Kohler.

Komschlies, K. L. *See* Goldschneider, Komschlies, and Greiner.

Kooistra, T. *See* Emeis and Kooistra.
Korngold, R. *See* Sprent, Schaefer, Lo, and Korngold.
Kraal, G., Breel, M., Janse, M., and Bruin, G. Langerhans' cells, veiled cells, and interdigitating cells in the mouse recognized by a monoclonal antibody. 981
Krangel, M. S. Secretion of HLA-A and -B antigens via an alternative RNA splicing pathway. 1173
Kreider, B. L. *See* Santoli, Tweardy, Ferrero, Kreider, and Rovera.
Kroczek, R. A. *See* Gunter, Kroczek, Shevach, and Germain.
Kubo, R. T. *See* Jankovic, Woodland, Melchers, Weltzien, Kubo, and Eichmann.
Kuff, E. L. *See* Leiter, Fewell, and Kuff.
Kupfer, A., Singer, S. J., and Dennert, G. On the mechanism of unidirectional killing in mixtures of two cytotoxic T lymphocytes. Unidirectional polarization of cytoplasmic organelles and the membrane-associated cytoskeleton in the effector cell. 489
Kyewski, B. A., Fathman, C. G., and Rouse, R. V. Intrathymic presentation of circulating non-MHC antigens by medullary dendritic cells. An antigen-dependent microenvironment for T cell differentiation. 231

L

Lafuse, W. P., Berg, N., Savarirayan, S., and David, C. S. Mapping of a second recombination hot spot within the I-E region of the mouse H-2 gene complex. 1518
Lake, J. P. *See* Caulfield, Luce, Shaffer, and Lake.
Lampert, P. W. *See* McChesney, Fujinami, Lampert, and Oldstone.
Lancki, D. W. *See* Moldwin, Lancki, Herold, and Fitch.
Lanier, L. L., Cwirla, S., Federspiel, N., and Phillips, J. H. Human natural killer cells isolated from peripheral blood do not rearrange T cell antigen receptor β chain genes. 209
Larsen, C.-J. *See* Mathieu-Mahul, Chen, Larsen, and Bensussan.
Larson, A. *See* Lewis, Larson, and Wilson.
Lechler, R. I., Ronchese, F., Braunstein, N. S., and Germain, R. N. I-A-restricted T cell antigen recognition. Analysis of the roles of A_α and A_β using DNA-mediated gene transfer. 678
Leder, P. *See* Chang, Dmitrovsky, Hieter, Mitchell, Leder, Turoczi, Kirsch, and Hollis.
Lee, S. S. *See* Schmidt, Bartley, Lee, Daley, Royer, Levine, Reinherz, Schlossman, and Ritz.
Lee, S.-H., Crocker, P., and Gordon, S. Macrophage plasma membrane and secretory properties in murine malaria. Effects of *Plasmodium yoelii* blood-stage infection on macrophages in liver, spleen, and blood. 54
Lefrancois, L., Thomas, M. L., Bevan, M. J., and Trowbridge, I. S. Different classes of T lymphocytes have different mRNAs for the leukocyte-common antigen, T200. 1337
—, *See* Yewdell, Bennink, Mackett, Lefrancois, Lyles, and Moss.
Lei, H.-Y. *See* Waltenbaugh, Sun, and Lei.
Leibowitz, J. *See* Rodriguez, Leibowitz, and David.
Leiter, E. H., Fewell, J. W., and Kuff, E. L. Glucose induces intracisternal type A retroviral gene transcription in pancreatic beta cells. 87
Leung, D. Y. M., Young, M. C., Wood, N., and Geha, R. S. Induction of IgE synthesis in normal human B cells. Sequential requirements for activation by an alloreactive T cell clone and IgE-potentiating factors. 713
Levine, H. *See* Schmidt, Bartley, Lee, Daley, Royer, Levine, Reinherz, Schlossman, and Ritz.
Lewis, D. B., Larson, A., and Wilson, C. B. Reduced interferon-gamma mRNA levels in human neonates. Evidence for an intrinsic T cell deficiency independent of other genes involved in T cell activation. 1018
Lewis, V. *See* Ukkonen, Lewis, Marsh, Helenius, and Mellman.
Limjuco, G. *See* Bayne, Rupp, Limjuco, Chin, and Schmidt.
Lin, P.-S. *See* Schmidt-Ullrich, Brown, Whittle, and Lin.
Lindahl, K. F., Hausmann, B., Robinson, P. J., Guénet, J.-L., Wharton, D. C., and Winking, H. Mta, the maternally transmitted antigen, is determined jointly by the chromosomal *Hmt* and the extrachromosomal *Mtf* genes. 334
—, *See* Stephan, Sun, Lindahl, Meyer, Hämmerling, Hood, and Steinmetz.
Lo, D. *See* Sprent, Schaefer, Lo, and Korngold.
Looney, J. R., Ryan, D. H., Takahashi, K., Fleit, H. B., Cohen, H. J., Abraham, G. N., and Anderson, C. L. Identification of a second class of IgG Fc receptors on human neutrophils. A 40 kilodalton molecule also found on eosinophils. 826
Lopez, A. F., Begley, C. G., Williamson, D. J., Warren, D. J., Vadas, M. A., and Sanderson, C. J. Murine eosinophil differentiation factor. An eosinophil-specific colony-stimulating factor with activity for human cells. 1085
Low, M. G. *See* Davitz, Low, and Nussenzweig.
Lowenstein, E. *See* Robinson, Skoskiewicz, Bloch, Castorena, Hayes, Lowenstein, Melvin, Michelassi, and Zapol.
Luce, K. J. *See* Caulfield, Luce, Shaffer, and Lake.
Luger, T. A. *See* Köck, Danner, Stadler, and Luger.
Lukacher, A. E. *See* Morrison, Lukacher, Braciale, Fan, and Braciale.
Lyles, D. S. *See* Yewdell, Bennink, Mackett, Lefrancois, Lyles, and Moss.

M

Mackett, M. *See* Yewdell, Bennink, Mackett, Lefrancois, Lyles, and Moss.
Majdic, O. *See* Holter, Fischer, Majdic, Stockinger, and Knapp.
Mak, T. W. *See* Cheng, Minden, Toyonaga, Mak, and McCulloch.
—, *See* Iwamoto, Rupp, Ohashi, Walker, Pircher, Joho, Hengartner, and Mak.

—, *See* Sangster, Minowada, Suciu-Foca, Minden, and Mak.
—, *See* Zauderer, Iwamoto, and Mak.
Malek, T. R. *See* Mizuochi, Ono, Malek, and Singer.
Maloney, M. A. *See* Bainton, Maloney, Patt, and Stern.
Manjula, B. N., Acharya, A. S., Fairwell, T., and Fischetti, V. A. Antigenic domains of the streptococcal Pep M5 protein. Localization of epitopes crossreactive with type 6 M protein and identification of a hypervariable region of the M molecule. 129
Mann, D. L. *See* Jarret, Mitsuya, Mann, Cossman, Broder, and Reitz.
Mann, T. N. *See* Roberts, Prill, and Mann.
March, C. *See* Grabstein, Eisenman, Mochizuki, Shanebeck, Conlon, Hopp, March, and Gillis.
Marsh, M. *See* Ukkonen, Lewis, Marsh, Helenius, and Mellman.
Marshall, J. D. *See* Sidman, Marshall, Beamer, Nadeau, and Unanue.
Mason, D. *See* Arthur and Mason.
Mathews, M. B. *See* Bunn, Bernstein, and Mathews.
Mathieu-Mahul, D., Chen, L. K., Larsen, C.-J., and Bensussan, A. Detection of T cell receptor α chain locus rearrangements in human antigen-specific T lymphocyte clones using a DNA probe specific for chromosome region 14q11. 1308
McChesney, M. B., Fujinami, R. S., Lampert, P. W., and Oldstone, M. B. A. Viruses disrupt functions of human lymphocytes. II. Measles virus suppresses antibody production by acting on B lymphocytes. 1331
McClintock, P. R. *See* Essani, Srinivasappa, McClintock, Prabhakar, and Notkins.
McCulloch, E. A. *See* Cheng, Minden, Toyonaga, Mak, and McCulloch.
McKerrow, J. H. *See* Keene, Petitt, Allen, and McKerrow.
Meek, R. L., Hoffman, J. S., and Benditt, E. P. Amyloidogenesis. One serum amyloid A isotype is selectively removed from the circulation. 499
Melchers, I. *See* Jankovic, Woodland, Melchers, Weltzien, Kubo, and Eichmann.
Melief, C. J. M. *See* Zijlstra, Vasmel, Voormanns, de Goede, Schoenmakers, Nieland, Slater, and Melief.
Mellman, I. *See* Ukkonen, Lewis, Marsh, Helenius, and Mellman.
Melvin, C. *See* Robinson, Skoskiewicz, Bloch, Castorena, Hayes, Lowenstein, Melvin, Michelassi, and Zapol.
Mentone, S. *See* Miettinen, Stow, Mentone, and Farquhar.
Mercolino, T. J., Arnold, L. W., and Haughton, G. Phosphatidyl choline is recognized by a series of Ly-1$^+$ murine B cell lymphomas specific for erythrocyte membranes. 155
Meyer, B. C., *See* Wright, Detmers, Jong, and Meyer.
Meyer, E. *See* Stephan, Sun, Lindahl, Meyer, Hämmerling, Hood, and Steinmetz.
Michelassi, F. *See* Robinson, Skoskiewicz, Bloch, Castorena, Hayes, Lowenstein, Melvin, Michelassi, and Zapol.
Miettinen, A., Stow, J. L., Mentone, S., and Farquhar, M. G. Antibodies to basement membrane heparan sulfate proteoglycans bind to the laminae rarae of the glomerular basement membrane (GBM) and induce subepithelial GBM thickening. 1064
Milanese, C., Siliciano, R. F., Schmidt, R. E., Ritz, J., Richardson, N. E., and Reinherz, E. L. A lymphokine that activates the cytolytic program of both cytotoxic T lymphocyte and natural killer clones. 1583
Milili, M. *See* Schiff, Milili, Hue, Rudikoff, and Fougereau.
Mills, K. H. G., Skehel, J. J., and Thomas, D. B. Extensive diversity in the recognition of influenza virus hemagglutinin by murine T helper clones. 1477
Minden, M. D. *See* Cheng, Minden, Toyonaga, Mak, and McCulloch.
—, *See* Sangster, Minowada, Suciu-Foca, Minden, and Mak.
Ming, J. *See* Tite, Kaye, Saizawa, Ming, Katz, Smith, and Janeway.
Minowada, J. *See* Sangster, Minowada, Suciu-Foca, Minden, and Mak.
Mitchell, K. *See* Chang, Dmitrovsky, Hieter, Mitchell, Leder, Turoczi, Kirsch, and Hollis.
Mitsuya, H. *See* Jarret, Mitsuya, Mann, Cossman, Broder, and Reitz.
Miyazaki, J.-I., Appella, E., Zhao, H., Forman, J., and Ozato, K. Expression and function of a nonglycosylated major histocompatibility class I antigen. 856
Mizuochi, T., Ono, S., Malek, T. R., and Singer, A. Characterization of two distinct primary T cell populations that secrete interleukin 2 upon recognition of class I or class II major histocompatibility antigens. 603
Mochizuki, D. *See* Grabstein, Eisenman, Mochizuki, Shanebeck, Conlon, Hopp, March, and Gillis.
Moingeon, P. *See* Nowill, Moingeon, Ythier, Graziani, Faure, Delmon, Rainaut, Forrestier, Bohuon, and Hercend.
Moldwin, R. L., Lancki, D. W., Herold, K. C., and Fitch, F. W. An antigen receptor–driven, interleukin 2–independent pathway for proliferation of murine cytolytic T lymphocyte clones. 1566
Mori, T. *See* Mori, Akikusa, Mori, Ueda, Iesato, Yoshida, Ogawa, Kato, Wakashin, Wakashin, and Okuda.
Mori, Y., Akikusa, B., Mori, T., Ueda, S., Iesato, K., Yoshida, H., Ogawa, M., Kato, I., Wakashin, Y., Wakashin, M., and Okuda, K. Experimental systemic amyloidosis induced by immunization with syngeneic organ extracts in mice. 1553
Morishita, H., Shiku, H., Horibe, K., Obata, Y., Stockert, E., Oettgen, H. F., Old, L. J., and Yamada, K. Cell surface antigens of murine leukemias induced by radiation leukemia virus. Recognition of individually distinct cell surface antigens by cytotoxic T cells on leukemias expressing crossreactive transplantation antigens. 452
Morrison, L. A., Lukacher, A. E., Braciale, V. L., Fan, D. P., and Braciale, T. J. Differences in antigen presentation to MHC class I– and class

II–restricted influenza virus–specific cytolytic T lymphocyte clones. 903

Morrison, R. P., Nishio, J., and Chesebro, B. Influence of the murine MHC (H-2) on Friend leukemia virus–induced immunosuppression. 301

Moss, B. *See* Yewdell, Bennink, Mackett, Lefrancois, Lyles, and Moss.

Mountz, J. D. *See* Klinman, Mushinski, Homda, Ishigatsubo, Mountz, Raveche, and Steinberg.

Muramatsu, S. *See* Inaba, Kitaura, Kato, Watanabe, Kawade, and Muramatsu.

Murtaugh, M. P., Dennison, O., Stein, J. P., and Davies, P. J. A. Retinoic acid–induced gene expression in normal and leukemic myeloid cells. 1325

Mushinski, J. F. *See* Klinman, Mushinski, Homda, Ishigatsubo, Mountz, Raveche, and Steinberg.

N

Nachman, R. L., Hajjar, K. A., Silverstein, R. L., and Dinarello, C. A. Interleukin 1 induces endothelial cell synthesis of plasminogen activator inhibitor. 1595

Nadeau, J. H. *See* Sidman, Marshall, Beamer, Nadeau, and Unanue.

Nakai, M. *See* Fujii, Sugamura, Sano, Nakai, Sugita, and Hinuma.

Nakamura, M. *See* Daley, Nakamura, and Gefter.

Nawroth, P. P., Bank, I., Handley, D., Cassimeris, J., Chess, L., and Stern, D. Tumor necrosis factor/cachectin interacts with endothelial cell receptors to induce release of interleukin 1. 1363

—, **and Stern, D.M.** Modulation of endothelial cell hemostatic properties by tumor necrosis factor. 740

Neri, T. *See* Palacios, Neri, and Brockhaus.

Nieland, J. *See* Zijlstra, Vasmel, Voormanns, de Goede, Schoenmakers, Nieland, Slater, and Melief.

Nishio, J. *See* Morrison, Nishio, and Chesebro.

Noonan, D. J., Kofler, R., Singer, P. A., Cardenas, G., Dixon, F. J., and Theofilopoulos, A. N. Delineation of a defect in T cell receptor β genes of NZW mice predisposed to autoimmunity. 644

Notkins, A. L. *See* Essani, Srinivasappa, McClintock, Prabhakar, and Notkins.

Nowill, A., Moingeon, P., Ythier, A., Graziani, M., Faure, F., Delmon, L., Rainaut, M., Forrestier, F., Bohuon, C., and Hercend, T. Natural killer clones derived from fetal (25 wk) blood. Probing the human T cell receptor with WT31 monoclonal antibody. 1601

Nudelman, E. *See* Jacewicz, Clausen, Nudelman, Donohue-Rolfe, and Keusch.

Nussenzweig, V. *See* Asch, Kinoshita, Jaffe, and Nussenzweig.

—, *See* Davitz, Low, and Nussenzweig.

O

Obata, Y. *See* Morishita, Shiku, Horibe, Obata, Stockert, Oettgen, Old, and Yamada.

O'Connor, J. V. *See* Dinarello, Cannon, Wolff, Bernheim, Beutler, Cerami, Figari, Palladino, and O'Connor.

Oettgen, H. F. *See* Morishita, Shiku, Horibe, Obata, Stockert, Oettgen, Old, and Yamada.

Ogawa, M. *See* Mori, Akikusa, Mori, Ueda, Iesato, Yoshida, Ogawa, Kato, Wakashin, Wakashin, and Okuda.

Ohashi, P. S. *See* Iwamoto, Rupp, Ohashi, Walker, Pircher, Joho, Hengartner, and Mak.

Ohno, N. *See* Kefalides, Pegg, Ohno, Poon-King, Zabriskie, and Fillit.

Okuda, K. *See* Mori, Akikusa, Mori, Ueda, Iesato, Yoshida, Ogawa, Kato, Wakashin, Wakashin, and Okuda.

Old, L. J. *See* Morishita, Shiku, Horibe, Obata, Stockert, Oettgen, Old, and Yamada.

Oldstone, M. B. A. *See* McChesney, Fujinami, Lampert, and Oldstone.

Ono, S. *See* Mizuochi, Ono, Malek, and Singer.

Orme, I. M., and Collins, F. M. Crossprotection against nontuberculous mycobacterial infections by *Mycobacterium tuberculosis* memory immune T lymphocytes. 203

Ozato, K. *See* Miyazaki, Appella, Zhao, Forman, and Ozato.

P

Paglia, L. *See* Wahl, Hunt, Allen, Wilder, Paglia, and Hand.

Palacios, R., Neri, T., and Brockhaus, M. Monoclonal antibodies specific for interleukin 3–sensitive murine cells. 369

Palladino, M. A., Jr. *See* Dinarello, Cannon, Wolff, Bernheim, Beutler, Cerami, Figari, Palladino, and O'Connor.

Palmer, E. *See* Epstein, Sham, Womack, Yagüe, Palmer, and Cohn.

Palombella, V. J. *See* Vilček, Palombella, Henriksen-Destefano, Swenson, Feinman, Hirai, and Tsujimoto.

Parmiani, G. *See* Anichini, Fossati, and Parmiani.

Patt, H. M. *See* Bainton, Maloney, Patt, and Stern.

Pawlowski, N. A. *See* Fels, Pawlowski, Abraham, and Cohn.

Pegg, M. T. *See* Kefalides, Pegg, Ohno, Poon-King, Zabriskie, and Fillit.

Perez, P., Hoffman, R. W., Titus, J. A., and Segal, D. M. Specific targeting of human peripheral blood T cells by heteroaggregates containing anti-T3 crosslinked to anti–target cell antibodies. 166

Petitt, M. G. *See* Keene, Petitt, Allen, and McKerrow.

Phillips, J. H. *See* Lanier, Cwirla, Federspiel, and Phillips.

Pircher, H. *See* Iwamoto, Rupp, Ohashi, Walker, Pircher, Joho, Hengartner, and Mak.

Polk, H. C., Jr. *See* Brown, Curtsinger, Brightwell, Ackerman, Tobin, Polk, George-Nascimento, Valenzuela, and Schultz.

Poon-King, T. *See* Kefalides, Pegg, Ohno, Poon-King, Zabriskie, and Fillit.

Prabhakar, B. S. *See* Essani, Srinivasappa, McClintock, Prabhakar, and Notkins.

Praz, F., and Ruuth, E. Growth-supporting activity of fragment Ba of the human alternative complement pathway for activated murine B lymphocytes. 1349

Prill, A. H. *See* Roberts, Prill, and Mann.

Primi, D., Drapier, A.-M., and Cazenave, P.-A. Differential expression of sets of highly homologous variable region gene products in selected and preimmune repertoires of inbred mouse strains. 1051

R

Rabinovitch, M., Zilberfarb, V., and Ramazeilles, C. Destruction of *Leishmania mexicana amazonensis* amastigotes within macrophages by lysosomotropic amino acid esters. 520

Rainaut, M. *See* Nowill, Moingeon, Ythier, Graziani, Faure, Delmon, Rainaut, Forrestier, Bohuon, and Hercend.

Ramazeilles, C. *See* Rabinovitch, Zilberfarb, and Ramazeilles.

Raska, K., Jr. *See* Sawada, Urbanelli, Raskova, Shenk, and Raska.

Raskova, J. *See* Sawada, Urbanelli, Raskova, Shenk, and Raska.

Raveche, E. S. *See* Klinman, Mushinski, Homda, Ishigatsubo, Mountz, Raveche, and Steinberg.

Reinherz, E. L. *See* Milanese, Siliciano, Schmidt, Ritz, Richardson, and Reinherz.

—, *See* Schmidt, Bartley, Lee, Daley, Royer, Levine, Reinherz, Schlossman, and Ritz.

Reiser, H. *See* Rock, Yeh, Gramm, Haber, Reiser, and Benacerraf.

Reitz, M. S. *See* Jarret, Mitsuya, Mann, Cossman, Broder, and Reitz.

Remington, J. S. *See* Catterall, Sharma, and Remington.

Richardson, N. E. *See* Milanese, Siliciano, Schmidt, Ritz, Richardson, and Reinherz.

Ritz, J. *See* Milanese, Siliciano, Schmidt, Ritz, Richardson, and Reinherz.

—, *See* Schmidt, Bartley, Lee, Daley, Royer, Levine, Reinherz, Schlossman, and Ritz.

Roberts, A. B. *See* Kehrl, Wakefield, Roberts, Jakowlew, Alvarez-Mon, Derynck, Sporn, and Fauci.

Roberts, N. J., Jr., Prill, A. H., and Mann, T. N. Interleukin 1 and interleukin 1 inhibitor production by human macrophages exposed to influenza virus or respiratory syncytial virus. Respiratory syncytial virus is a potent inducer of inhibitor activity. 511

Robinson, D. R., Skoskiewicz, M., Bloch, K. J., Castorena, G., Hayes, E., Lowenstein, E., Melvin, C., Michelassi, F., and Zapol, W. M. Cyclooxygenase blockade elevates leukotriene E_4 production during acute anaphylaxis in sheep. 1509

Robinson, P. J. *See* Lindahl, Hausmann, Robinson, Guénet, Wharton, and Winking.

Rock, K. L., Yeh, E. T. H., Gramm, C. F., Haber, S. I., Reiser, H., and Benacerraf, B. TAP, a novel T cell activating protein involved in the stimulation of MHC-restricted T lymphocytes. 315

Rodriguez, M., Leibowitz, J., and David, C. S. Susceptibility to Theiler's virus–induced demyelination. Mapping of the gene within the H-2D region. 620

Ronchese, F. *See* Lechler, Ronchese, Braunstein, and Germain.

Rothlein, R., and Springer, T. A. The requirement for lymphocyte function–associated antigen 1 in homotypic leukocyte adhesion stimulated by phorbol ester. 1132

Rouse, R. V. *See* Kyewski, Fathman, and Rouse.

Rovera, G. *See* Santoli, Tweardy, Ferrero, Kreider, and Rovera.

Rowley, D. A. *See* Shah, Keij, Gilbertson, and Rowley.

Royer, H. D. *See* Schmidt, Bartley, Lee, Daley, Royer, Levine, Reinherz, Schlossman, and Ritz.

Rudikoff, S. *See* Schiff, Milili, Hue, Rudikoff, and Fougereau.

Rupp, E. A. *See* Bayne, Rupp, Limjuco, Chin, and Schmidt.

Rupp, F. *See* Iwamoto, Rupp, Ohashi, Walker, Pircher, Joho, Hengartner, and Mak.

Ruuth, E. *See* Praz and Ruuth.

Ryan, D. H. *See* Looney, Ryan, Takahashi, Fleit, Cohen, Abraham, and Anderson.

S

Sachs, D. H. *See* Ildstad, Bluestone, and Sachs.

—, *See* Shinohara, Bluestone, and Sachs.

Saizawa, K. M. *See* Tite, Kaye, Saizawa, Ming, Katz, Smith, and Janeway.

Sanderson, C. J. *See* Lopez, Begley, Williamson, Warren, Vadas, and Sanderson.

Sangster, R. N., Minowada, J., Suciu-Foca, N., Minden, M., and Mak, T. W. Rearrangement and expression of the α, β, and γ chain T cell receptor genes in human thymic leukemia cells and functional T cells. 1491

Sano, K. *See* Fujii, Sugamura, Sano, Nakai, Sugita, and Hinuma.

Santoli, D., Tweardy, D. J., Ferrero, D., Kreider, B. L., and Rovera, G. A suppressor lymphokine produced by human T leukemia cell lines. Partial characterization and spectrum of activity against normal and malignant hemopoietic ceils. 18

Savarirayan, S. *See* Lafuse, Berg, Savarirayan, and David.

Sawada, Y., Urbanelli, D., Raskova, J., Shenk, T. E., and Raska, K., Jr. Adenovirus tumor–specific transplantation antigen is a function of the E1A early region. 563

Schaefer, M. *See* Sprent, Schaefer, Lo, and Korngold.

Schiff, C., Milili, M., Hue, I., Rudikoff, S., and Fougereau, M. Genetic basis for expression of the idiotypic network. One unique Ig V_H germline gene accounts for the major family of Ab1 and Ab3 (Ab1′) antibodies of the GAT system. 573

Schlossman, S. F. *See* Schmidt, Bartley, Lee, Daley, Royer, Levine, Reinherz, Schlossman, and Ritz.

Schmidt, J. A. *See* Bayne, Rupp, Limjuco, Chin, and Schmidt.

Schmidt, R. E., Bartley, G. T., Lee, S. S., Daley, J. F., Royer, H. D., Levine, H., Reinherz, E. L.,

Schlossman, S. F., and Ritz, J. Expression of the NKTa clonotype in a series of human natural killer clones with identical cytotoxic specificity. 812

—, *See* Milanese, Siliciano, Schmidt, Ritz, Richardson, and Reinherz.

Schmidt-Ullrich, R., Brown, J., Whittle, H., and Lin, P.-S. Human-human hybridomas secreting monoclonal antibodies to the M_r 195,000 *Plasmodium falciparum* blood stage antigens. 179

Schoenmakers, H. J. *See* Zijlstra, Vasmel, Voormans, de Goede, Schoenmakers, Nieland, Slater, and Melief.

Schultz, G. S. *See* Brown, Curtsinger, Brightwell, Ackerman, Tobin, Polk, George-Nascimento, Valenzuela, and Schultz.

Scott, W. A. *See* Aderem, Scott, and Cohn.

Segal, D. M. *See* Perez, Hoffman, Titus, and Segal.

Sertl, K., Takemura, T., Tschachler, E., Ferrans, V. J., Kaliner, M. A., and Shevach, E. M. Dendritic cells with antigen-presenting capability reside in airway epithelium, lung parenchyma, and visceral pleura. 436

Seto, S. *See* Carson, Seto, and Wasson.

Seya, T., Turner, J. R., and Atkinson, J. P. Purification and characterization of a membrane protein (gp45-70) that is a cofactor for cleavage of C3b and C4b. 837

Seyer, J. M. *See* Beachey, Gras-Masse, Tarter, Jolivet, Audibert, Chedid, and Seyer.

Shaffer, D. *See* Caulfield, Luce, Shaffer, and Lake.

Shah, P. D., Keij, J., Gilbertson, S. M., and Rowley, D. A. Thy-1$^+$ and Thy-1$^-$ natural killer cells suppress dendritic cells. 1012

Sham, G. *See* Epstein, Sham, Womack, Yagüe, Palmer, and Cohn.

Shanebeck, K. *See* Grabstein, Eisenman, Mochizuki, Shanebeck, Conlon, Hopp, March, and Gillis.

Sharma, S. D. *See* Catterall, Sharma, and Remington.

Sharrow, S. O. *See* Kawamura, Sharrow, Alling, Stephany, York-Jolley, and Berzofsky.

Shenk, T. E. *See* Sawada, Urbanelli, Raskova, Shenk, and Raska.

Shevach, E. M. *See* Gunter, Kroczek, Shevach, and Germain.

—, *See* Sertl, Takemura, Tschachler, Ferrans, Kaliner, and Shevach.

Shiku, H. *See* Morishita, Shiku, Horibe, Obata, Stockert, Oettgen, Old, and Yamada.

Shinohara, N., Bluestone, J. A., and Sachs, D. H. Cloned cytotoxic T lymphocytes that recognize an I-A region product in the context of a class I antigen. 972

Sidman, C. L., Marshall, J. D., Beamer, W. G., Nadeau, J. H., and Unanue, E. R. Two loci affecting B cell responses to B cell maturation factors. 116

Siliciano, R. F. *See* Milanese, Siliciano, Schmidt, Ritz, Richardson, and Reinherz.

Silvers, W. K. *See* Kimura, Silvers, and Wilson.

Silverstein, R. L. *See* Nachman, Hajjar, Silverstein, and Dinarello.

Singer, A. *See* Mizuochi, Ono, Malek, and Singer.

Singer, P. A. *See* Noonan, Kofler, Singer, Cardenas, Dixon, and Theofilopoulos.

Singer, S. J. *See* Kupfer, Singer, and Dennert.

Skehel, J. J. *See* Mills, Skehel, and Thomas.

Skoskiewicz, M. *See* Robinson, Skoskiewicz, Bloch, Castorena, Hayes, Lowenstein, Melvin, Michelassi, and Zapol.

Slater, R. M. *See* Zijlstra, Vasmel, Voormanns, de Goede, Schoenmakers, Nieland, Slater, and Melief.

Sluiter, W. *See* van Furth and Sluiter.

Smith, K. A. *See* Gullberg and Smith.

Smith, L. A. *See* Tite, Kaye, Saizawa, Ming, Katz, Smith, and Janeway.

Sporn, M. B. *See* Kehrl, Wakefield, Roberts, Jakowlew, Alvarez-Mon, Derynck, Sporn, and Fauci.

Sprent, J., Schaefer, M., Lo, D., and Korngold, R. Properties of purified T cell subsets. II. In vivo responses to class I vs. class II H-2 differences. 998

Springer, T. A. *See* Rothlein and Springer.

Srinivasappa, J. *See* Essani, Srinivasappa, McClintock, Prabhakar, and Notkins.

Stadler, B. M. *See* Köck, Danner, Stadler, and Luger.

Stein, J. P. *See* Murtaugh, Dennison, Stein, and Davies.

Steinberg, A. D. *See* Klinman, Mushinski, Homda, Ishigatsubo, Mountz, Raveche, and Steinberg.

Steinman, R. M. *See* Granelli-Piperno, Andrus, and Steinman.

—, *See* Inaba and Steinman.

Steinmetz, M. *See* Stephan, Sun, Lindahl, Meyer, Hämmerling, Hood, and Steinmetz.

Stephan, D., Sun, H., Lindahl, K. F., Meyer, E., Hämmerling, G., Hood, L., and Steinmetz, M. Organization and evolution of D region class I genes in the mouse major histocompatibility complex. 1227

Stephany, D. *See* Kawamura, Sharrow, Alling, Stephany, York-Jolley, and Berzofsky.

Stern, D. M. *See* Nawroth and Stern.

—, *See* Nawroth, Bank, Handley, Cassimeris, Chess, and Stern.

Stern, R. *See* Bainton, Maloney, Patt, and Stern.

Stockert, E. *See* Morishita, Shiku, Horibe, Obata, Stockert, Oettgen, Old, and Yamada.

Stockinger, H. *See* Holter, Fischer, Majdic, Stockinger, and Knapp.

Stow, J. L. *See* Miettinen, Stow, Mentone, and Farquhar.

Suciu-Foca, N. *See* Sangster, Minowada, Suciu-Foca, Minden, and Mak.

Sugamura, K. *See* Fujii, Sugamura, Sano, Nakai, Sugita, and Hinuma.

Sugita, K. *See* Fujii, Sugamura, Sano, Nakai, Sugita, and Hinuma.

Sun, H. *See* Stephan, Sun, Lindahl, Meyer, Hämmerling, Hood, and Steinmetz.

Sun, L. *See* Waltenbaugh, Sun, and Lei.

Swank, R. T. *See* Takeuchi, Wood, and Swank.

Swenson, C. *See* Vilček, Palombella, Henriksen-Destefano, Swenson, Feinman, Hirai, and Tsujimoto.

T

Takahashi, K. *See* Looney, Ryan, Takahashi, Fleit, Cohen, Abraham, and Anderson.

Takemura, T. *See* Sertl, Takemura, Tschachler, Ferrans, Kaliner, and Shevach.

Takeuchi, K., Wood, H., and Swank, R. T. Lysosomal elastase and cathepsin G in beige mice. Neutrophils of beige (Chediak-Higashi) mice selectively lack lysosomal elastase and cathepsin G. 665

Tarter, A. *See* Beachey, Gras-Masse, Tarter, Jolivet, Audibert, Chedid, and Seyer.

Theofilopoulos, A. N. *See* Andrews, Hang, Theofilopoulos, and Dixon.

—, *See* Noonan, Kofler, Singer, Cardenas, Dixon, and Theofilopoulos.

Thole, J. *See* Emmrich, Thole, van Embden, and Kaufmann.

Thomas, D. B. *See* Mills, Skehel, and Thomas.

Thomas, M. L. *See* Lefrancois, Thomas, Bevan, and Trowbridge.

Thompson, D. B. *See* Cheever, Thompson, Klarnet, and Greenberg.

Tite, J. P., Kaye, J., Saizawa, K. M., Ming, J., Katz, M. E., Smith, L. A., and Janeway, C. A., Jr. Direct interactions between B and T lymphocytes bearing complementary receptors. 189

Titus, J. A. *See* Perez, Hoffman, Titus, and Segal.

Tobin, G. R. *See* Brown, Curtsinger, Brightwell, Ackerman, Tobin, Polk, George-Nascimento, Valenzuela, and Schultz.

Toossi, Z., Kleinhenz, M. E., and Ellner, J. J. Defective interleukin 2 production and responsiveness in human pulmonary tuberculosis. 1162

Tourtellotte, W. W. *See* Walsh and Tourtellotte.

Toyonaga, B. *See* Cheng, Minden, Toyonaga, Mak, and McCulloch.

Trowbridge, I. S. *See* Lefrancois, Thomas, Bevan, and Trowbridge.

Tschachler, E. *See* Sertl, Takemura, Tschachler, Ferrans, Kaliner, and Shevach.

Tsujimoto, M. *See* Vilček, Palombella, Henriksen-Destefano, Swenson, Feinman, Hirai, and Tsujimoto.

Turner, J. R. *See* Seya, Turner, and Atkinson.

Turoczi, L. *See* Chang, Dmitrovsky, Hieter, Mitchell, Leder, Turoczi, Kirsch, and Hollis.

Tweardy, D. J. *See* Santoli, Tweardy, Ferrero, Kreider, and Rovera.

U

Uckun, F. M., Gajl-Peczalska, K. J., Kersey, J. H., Houston, L. L., and Vallera, D. A. Use of a novel colony assay to evaluate the cytotoxicity of an immunotoxin containing pokeweed antiviral protein against blast progenitor cells freshly obtained from patients with common B-lineage acute lymphoblastic leukemia. 347

Ueda, S. *See* Mori, Akikusa, Mori, Ueda, Iesato, Yoshida, Ogawa, Kato, Wakashin, Wakashin, and Okuda.

Ukkonen, P., Lewis, V., Marsh, M., Helenius, A., and Mellman, I. Transport of macrophage Fc receptors and Fc receptor–bound ligands to lysosomes. 952

Unanue, E. R. *See* Sidman, Marshall, Beamer, Nadeau, and Unanue.

Urbanelli, D. *See* Sawada, Urbanelli, Raskova, Shenk, and Raska.

V

Vadas, M. A. *See* Lopez, Begley, Williamson, Warren, Vadas, and Sanderson.

Valenzuela, P. *See* Brown, Curtsinger, Brightwell, Ackerman, Tobin, Polk, George-Nascimento, Valenzuela, and Schultz.

Vallera, D. A. *See* Uckun, Gajl-Peczalska, Kersey, Houston, and Vallera.

van Embden, J. *See* Emmrich, Thole, van Embden, and Kaufmann.

van Furth, R., and Sluiter, W. Distribution of blood monocytes between a marginating and a circulating pool. 474

Vasmel, W. L. E. *See* Zijlstra, Vasmel, Voormanns, de Goede, Schoenmakers, Nieland, Slater, and Melief.

Vilček, J., Palombella, V. J., Henriksen-Destefano, D., Swenson, C., Feinman, R., Hirai, M., and Tsujimoto, M. Fibroblast growth enhancing activity of tumor necrosis factor and its relationship to other polypeptide growth factors. 632

Voormanns, M. *See* Zijlstra, Vasmel, Voormanns, de Goede, Schoenmakers, Nieland, Slater, and Melief.

W

Wahl, S. M., Hunt, D. A., Allen, J. B., Wilder, R. L., Paglia, L., and Hand, A. R. Bacterial cell wall–induced hepatic granulomas. An in vivo model of T cell–dependent fibrosis. 884

Wakashin, M. *See* Mori, Akikusa, Mori, Ueda, Iesato, Yoshida, Ogawa, Kato, Wakashin, Wakashin, and Okuda.

Wakashin, Y. *See* Mori, Akikusa, Mori, Ueda, Iesato, Yoshida, Ogawa, Kato, Wakashin, Wakashin, and Okuda.

Wakefield, L. M. *See* Kehrl, Wakefield, Roberts, Jakowlew, Alvarez-Mon, Derynck, Sporn, and Fauci.

Waldmann, H. *See* Benjamin, Cobbold, Clark, and Waldmann.

Walker, C. L. *See* Iwamoto, Rupp, Ohashi, Walker, Pircher, Joho, Hengartner, and Mak.

Walsh, M. J., and Tourtellotte, W. W. Temporal invariance and clonal uniformity of brain and cerebrospinal IgG, IgA, and IgM in multiple sclerosis. 41

Waltenbaugh, C., Sun, L., and Lei, H.-Y. Regulation of immune responses by I-J gene products. VI. Recognition of I-E molecules by I-J-bearing suppressor factors. 797

Warren, D. J. *See* Lopez, Begley, Williamson, Warren, Vadas, and Sanderson.

Wasson, D. B. *See* Carson, Seto, and Wasson.

Watanabe, Y. *See* Inaba, Kitaura, Kato, Watanabe, Kawade, and Muramatsu.

Weltzien, H.-U. *See* Jankovic, Woodland, Melchers, Weltzien, Kubo, and Eichmann.

Westly, H. J., Kleiss, A. J., Kelley, K. W., Wong, P. K. Y., and Yuen, P.-H. Newcastle disease virus–infected splenocytes express the proopiomelanocortin gene. 1589

Weyand, C. M., Goronzy, J., Dallman, M. J., and Fathman, C. G. Administration of recombinant interleukin 2 in vivo induces a polyclonal IgM response. 1607

Wharton, D. C. *See* Lindahl, Hausmann, Robinson, Guénet, Wharton, and Winking.

Whittle, H. *See* Schmidt-Ullrich, Brown, Whittle, and Lin.

Wilder, R. L. *See* Wahl, Hunt, Allen, Wilder, Paglia, and Hand.

Williamson, D. J. *See* Lopez, Begley, Williamson, Warren, Vadas, and Sanderson.

Wilson, C. B. *See* Lewis, Larson, and Wilson.

Wilson, D. B. *See* Kimura, Silvers, and Wilson.

Winking, H. *See* Lindahl, Hausmann, Robinson, Guénet, Wharton, and Winking.

Wolff, S. M. *See* Dinarello, Cannon, Wolff, Bernheim, Beutler, Cerami, Figari, Palladino, and O'Connor.

Womack, J. *See* Epstein, Sham, Womack, Yagüe, Palmer, and Cohn.

Wong, P. K. Y. *See* Westly, Kleiss, Kelley, Wong, and Yuen.

Wood, H. *See* Takeuchi, Wood, and Swank.

Wood, N. *See* Leung, Young, Wood, and Geha.

Woodland, D. *See* Jankovic, Woodland, Melchers, Weltzien, Kubo, and Eichmann.

Wright, S. D., Detmers, P. A., Jong, M. T. C., and Meyer, B. C. Interferon-γ depresses binding of ligand by C3b and C3bi receptors on cultured human monocytes, an effect reversed by fibronectin. 1245

Y

Yagüe, J. *See* Epstein, Sham, Womack, Yagüe, Palmer, and Cohn.

Yamada, K. *See* Morishita, Shiku, Horibe, Obata, Stockert, Oettgen, Old, and Yamada.

Yeh, E. T. H. *See* Rock, Yeh, Gramm, Haber, Reiser, and Benacerraf.

Yewdell, J. W., Bennink, J. R., Mackett, M., Lefrancois, L., Lyles, D. S., and Moss, B. Recognition of cloned vesicular stomatitis virus internal and external gene products by cytotoxic T lymphocytes. 1529

York-Jolley, J. *See* Kawamura, Sharrow, Alling, Stephany, York-Jolley, and Berzofsky.

Yoshida, H. *See* Mori, Akikusa, Mori, Ueda, Iesato, Yoshida, Ogawa, Kato, Wakashin, Wakashin, and Okuda.

Young, M. C. *See* Leung, Young, Wood, and Geha.

Ythier, A. *See* Nowill, Moingeon, Ythier, Graziani, Faure, Delmon, Rainaut, Forrestier, Bohuon, and Hercend.

Yuen, P.-H. *See* Westly, Kleiss, Kelley, Wong, and Yuen.

Z

Zabriskie, J. B. *See* Johnston and Zabriskie.

—, *See* Kefalides, Pegg, Ohno, Poon-King, Zabriskie, and Fillit.

Zapol, W. M. *See* Robinson, Skoskiewicz, Bloch, Castorena, Hayes, Lowenstein, Melvin, Michelassi, and Zapol.

Zauderer, M., Iwamoto, A., and Mak, T. W. γ gene rearrangement and expression in autoreactive helper T cells. 1314

Zhao, H. *See* Miyazaki, Appella, Zhao, Forman, and Ozato.

Zijlstra, M., Vasmel, W. L. E., Voormanns, M., de Goede, R. E. Y., Schoenmakers, H. J., Nieland, J., Slater, R. M., and Melief, C. J. M. Imbalanced MHC class II molecule expression at surface of murine B cell lymphomas. 1213

Zilberfarb, V. *See* Rabinovitch, Zilberfarb, and Ramazeilles.